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| 10/537,593  | 06/06/2005  | Liang Gan            | NL021309            | 6759             |
| 24737 7590 03/20/2008<br>PHILIPS INTELLECTUAL PROPERTY & STANDARDS<br>P.O. BOX 3001<br>BRIARCLIFF MANOR, NY 10510 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| MENDOZA, JUNIOR O   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/537,593

**Applicant(s)**

GAN ET AL.

**Examiner**

JUNIOR O. MENDOZA

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 06/06/2005
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because Figure 2 includes an application (34) element, which is referred as application processor (34) as disclosed on paragraph [0015], the examiner suggests that "application" (34) be change to "application processor" (34) for clarity purposes.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 2, 6, 7, 8, 11, 12, 13, 14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanungo et al. (Patent No US 5,870,084) in view of Adler et al. (Patent No US 7,155,672). Hereinafter referenced as Kanungo and Adler, respectively.

Regarding **claim 1**, Kanungo discloses an interactive television system comprising: a broadcast center (10) including a source of video signals, a source of application programs, and a source of font files (Broadcast center [12] provides a video and audio stream, applications and resource files such as glyphs, col. 9 lines 6-20 also exhibited on fig 1 and 3)

and a transmitter (12) which acts to transmit the video signals, application programs and partial font files (The broadcast center [12] transmits a stream of digital data to a set top box [18], col. 7 lines 13-17 also exhibited on fig 1);

and an interactive television receiver responsive to the transmitted video signals application programs, and partial font files which displays text produced in response to the partial font files (Set top box [18] receives the transmitted content, col. 7 lines 13-25 also exhibited on fig 1).

It is noted that Kanungo fails to explicitly disclose that the font files comprises a partial font file containing the fonts applicable to a given application which is less than the full font file of a given language. However, Adler discloses that the font files comprises a partial font file containing the fonts applicable to a given application which is less than the full font file of a given language (Sub-set character files are created which includes only the characters needed to display an application, col.3 lines 57-67 col. 4 lines 1-9 and col. 9 lines 4-16)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo by specifically providing the elements mentioned above, as taught by Adler, for the purpose of saving space at the receiver side since there would not be a need to transmit an entire character library but only the characters needed to be displayed which is only a fraction in size compared to a given full character library.

Regarding **claim 2**, Kanungo and Adler disclose the interactive television system of claim 1; moreover, Adler discloses that the source of font files comprises a partial font generator (38) (A glyph sub-set is created including only the characters that apply to the electronic content, col. 11 lines 39-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo by specifically providing the elements mentioned above, as taught by Adler, for the purpose of saving space at the receiver side since there would not be a need to transmit an entire character library but only the characters needed to be displayed which is only a fraction in size compared to a given full character library.

Regarding **claim 6**, Kanungo discloses a method for generating a character font file for an application of an interactive television system comprising:

analyzing an interactive television application to determine if a particular font is used in the application (An application developer develops an application which references to the textual information to be implemented on the application, col. 9 lines 40-48 also exhibited on fig 3 and 4);

It is noted that Kanungo fails to explicitly disclose that if the particular font is used in the application, adding the font to a partial font file; if the particular font is not used in the application, not adding the font to a partial font file and repeating the previous steps until the text of the application has been fully analyzed.

However, Adler discloses that if the particular font is used in the application, adding the font to a partial font file; if the particular font is not used in the application, not adding the font to a partial font file and repeating the previous steps until the text of the

application has been fully analyzed (Only the characters needed to display the electronic content will be added to the glyph sub-set until all the characters needed for the electronic content are included on the glyph sub-set, col. 3 lines 51-58 col. 9 lines 4-16);

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo by specifically providing the elements mentioned above, as taught by Adler, for the purpose of saving space at the receiver side since there would not be a need to transmit an entire character library but only the characters needed to be displayed which is only a fraction in size compared to a given full character library.

Regarding **claim 7**, Kanungo and Adler disclose the interactive television system of claim 6; moreover, Adler discloses storing the partial font file after the application has been completely analyzed (Database [20] stores sets of fonts or other information that can be sent to the electronic device receiver [12], col. 4 lines 64-67 col. 12 lines 20-23 also exhibited on fig 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo by specifically providing the elements mentioned above, as taught by Adler, for the purpose of saving space at the receiver side since there would not be a need to transmit an entire character library but only the characters needed to be displayed which is only a fraction in size compared to a given full character library.

Regarding **claim 8**, Kanungo and Adler disclose the interactive television system of claim 7; moreover, Kanungo discloses storing comprises storing the partial font file as a resource file for the application (The language specific textual information of the application program is included in a resource file [62] which is transmitted as part of the application [64] to the set top box [18], Col. 9 lines 11-15 also exhibited on fig 3).

Regarding **claim 11**, Kanungo discloses an interactive television system having a broadcast center comprising: a source of video/audio streams (Broadcast center [12] as exhibited on fig 1);

a source of applications (Application source [64] column 9 lines 6-20 as exhibited on fig 3);

and a transmitter (12) responsive to a video/audio stream, an application, and a partial font file for the transmission of a transport stream (The broadcast center [12] transmits a stream of digital data to a set top box [18], col. 7 lines 13-17 also exhibited on fig 1).

It is noted that Kanungo fails to explicitly disclose a partial font generator (38) responsive to the textual content of an application which produces a partial font file. However, Adler discloses a partial font generator (38) responsive to the textual content of an application which produces a partial font file (A glyph sub-set is created including only the characters that apply to the electronic content, col. 11 lines 39-55).



Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo by specifically providing the elements mentioned above, as taught by Adler, for the purpose of saving space at the receiver side since there would not be a need to transmit an entire character library but only the characters needed to be displayed which is only a fraction in size compared to a given full character library.

Regarding **claim 12**, Kanungo and Adler disclose the interactive television system of claim 11; moreover, Kanungo discloses that the partial font generator comprises the manual selection of fonts used in an application (Preferably, the application developer creates the application and the resource file using a text editor tool, col. 4 lines 9-12 col. 9 lines 61-64 col. 10 lines 24-26).

Regarding **claim 13**, Kanungo and Adler disclose the interactive television system of claim 11; it is noted that Kanungo fails to explicitly disclose that the partial font generator (38) comprises an automated addition of a font newly requested by an application to a partial font file .However, Adler discloses that the partial font generator (38) comprises an automated addition of a font newly requested by an application to a partial font file (If a glyph subset used in an application is not available or has not been created, then such glyph subset is requested, col.13 lines 44-67)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo by specifically providing the elements

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mentioned above, as taught by Adler, for the purpose of saving space at the receiver side since there would not be a need to transmit an entire character library but only the characters needed to be displayed which is only a fraction in size compared to a given full character library.

Regarding **claim 14**, Kanungo and Adler disclose the interactive television system of claim 11; moreover, Kanungo discloses an interactive video receiver responsive to a received transport stream including:

a receiver which separates an application from a video/audio stream (De-multiplexer [38] separates the video/audio stream and the application, col. 9 lines 21-36 also exhibited on fig 3);

an application processor (Application [64] is executed on the operating environment [70], col. 9 lines 21-36 also exhibited on fig 3);

a video signal processor (Video multiplexer [48] multiplexes the rendered text information and the video/audio stream, col. 9 lines 21-36 also exhibited on fig 3);

and a television display (22) coupled to the application processor and the video signal processor for the display of video and application content (Television [20] displays the multiplexed information, col. 9 lines 21-36 also exhibited on fig 3).

Regarding **claim 15**, Kanungo and Adler disclose the interactive television system of claim 14, wherein the application processor is responsive to a partial font file for the display of textual information of an application on the television display (22) (The application program includes textual information, including string characters, where the set top box [18] is configured to receive the application program and render the characters for display on the television [20]. Col. 7 lines 56-61 also exhibited on fig 3).

4. **Claims 3, 4, 5, 9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanungo in view of Adler further in view of Eyer et al. (Patent No US 5,982,445). Hereinafter referenced as Eyer.

Regarding **claim 3**, Kanungo and Adler disclose the interactive television system of claim 1; moreover, Kanungo discloses that the video signals, application programs and partial font files are multiplexed in a transport stream (A broadcast center mixes the application program, including the resource file with a digital audio/video data stream, col. 4 lines 8-16 also exhibited on fig. 3);

It is noted that Kanungo and Adler fail to explicitly disclose that the application programs are objects in an object carousel (90) multiplexed in the transport stream. However, Eyer discloses that the application programs are objects in an object carousel (90) multiplexed in the transport stream (The source data for each screen presentation is broadcasted in a carousel or cyclic manner, col. 11 lines 4-8 also exhibited on fig 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo and Adler by specifically providing the elements mentioned above, as taught by Eyer, for the purpose of repeatedly delivering data in a continuous cycle which allows data to be pushed from a broadcaster to multiple receivers by transmitting a data set repeatedly in a standard form.

Regarding **claim 4**, Kanungo and Adler disclose the interactive television system of claim 3; moreover, Kanungo discloses that the application programs and partial font files are separate objects of the object carousel (90) (The textual data is included in a resource file but separate from the application program, col. 4 lines 12-16 and col. 9 lines 49-56 also exhibited on fig. 3).

Regarding **claim 5**, Kanungo and Adler disclose the interactive television system of claim 3; moreover, Kanungo discloses that the partial font files are embedded in the application programs (Alternatively, the textual information may be contained in the application program itself, col. 9 lines 58-60 also exhibited on fig. 3).

Regarding **claim 9**, Kanungo and Adler disclose the interactive television system of claim 7; it is noted that Kanungo and Adler fail to explicitly disclose placing the application and the partial font file in an object carousel (90). However, Eyer discloses placing the application and the partial font file in an object carousel (90) (The source

data for each screen presentation is broadcasted in a carousel or cyclic manner, col. 11 lines 4-8 also exhibited on fig 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo and Adler by specifically providing the elements mentioned above, as taught by Eyer, for the purpose of repeatedly delivering data in a continuous cycle which allows data to be pushed from a broadcaster to multiple receivers by transmitting a data set repeatedly in a standard form.

Regarding **claim 10**, Kanungo and Adler disclose the interactive television system of claim 9; moreover, Kanungo discloses transmitting the application and the partial font file to an interactive television receiver (The language specific textual information of the application program is included in a resource file [62] which is transmitted as part of the application [64] to the set top box [18], Col. 9 lines 11-15 also exhibited on fig 33).

5. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanungo view of Adler further in view of Willis. (Patent No US 7,222,336). Hereinafter referenced as Willis.

Regarding **claim 16**, Kanungo and Adler disclose the interactive television system of claim 1; it is noted that Kanungo and Adler fail to explicitly disclose that the source of applications comprises a source of applications compatible with the MHP standard. However, Willis discloses that the source of applications comprises a source of applications compatible with the MHP standard (TV broadcasting systems are adapted to transmit audio and video together with application data to a corresponding receiving system in accordance with the DVB's MHP standard, col. 3 lines 44-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanungo and Adler by specifically providing the elements mentioned above, as taught by Willis, for the purpose of providing an open middleware system standard for interactive digital television systems, which enables the reception and execution of interactive Java based application on a television set.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNIOR O. MENDOZA whose telephone number is (571)270-3573. The examiner can normally be reached on Monday - Friday 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junior O Mendoza  
Examiner  
Art Unit 2623

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March 12, 2008

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